

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 09/319,156C
Source: 1FW16
Date Processed by STIC: 11/10/05

ENTERED



IFW16

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/319,156C

DATE: 11/10/2005

TIME: 13:04:56

Input Set : A:\103514-mlm-11-05.ST25.txt
 Output Set: N:\CRF4\11102005\I319156C.raw

3 <110> APPLICANT: PARANHOS-BACCALA, Glauzia
 4 KOMURIAN-PRADEL, Florence
 5 BEDIN, Frederic
 6 SODOYER, Mireille
 7 OTT, Catherine
 8 MALLET, Francois
 9 PERRON, Herve
 10 MANDRAND, Bernard
 12 <120> TITLE OF INVENTION: RETROVIRAL NUCLEIC MATERIAL AND NUCLEOTIDE FRAGMENTS, IN
 13 PARTICULAR ASSOCIATED WITH MULTIPLE SCLEROSIS AND/OR RHEUMATOID
 14 ARTHRITIS, FOR DIAGNOSTIC, PROPHYLACTIC AND THERAPEUTIC USES
 16 <130> FILE REFERENCE: 103514
 18 <140> CURRENT APPLICATION NUMBER: US/09/319,156C
 19 <141> CURRENT FILING DATE: 1999-11-02
 21 <150> PRIOR APPLICATION NUMBER: PCT/FR98/01460
 22 <151> PRIOR FILING DATE: 1998-07-07
 24 <150> PRIOR APPLICATION NUMBER: FR/97/08816
 25 <151> PRIOR FILING DATE: 1997-07-07
 27 <160> NUMBER OF SEQ ID NOS: 45
 29 <170> SOFTWARE: PatentIn version 3.2
 31 <210> SEQ ID NO: 1
 32 <211> LENGTH: 34
 33 <212> TYPE: DNA
 34 <213> ORGANISM: MSRV
 36 <400> SEQUENCE: 1
 37 gactcgctgc agatcgattt tttttttttt tttt 34
 40 <210> SEQ ID NO: 2
 41 <211> LENGTH: 30
 42 <212> TYPE: DNA
 43 <213> ORGANISM: MSRV
 45 <400> SEQUENCE: 2
 46 gccatcaaggc cacccaagaa ctcttaactt 30
 49 <210> SEQ ID NO: 3
 50 <211> LENGTH: 30
 51 <212> TYPE: DNA
 52 <213> ORGANISM: MSRV
 54 <400> SEQUENCE: 3
 55 ccaatagcca gaccattata tacactaatt 30
 58 <210> SEQ ID NO: 4
 59 <211> LENGTH: 310
 60 <212> TYPE: DNA
 61 <213> ORGANISM: MSRV
 63 <400> SEQUENCE: 4

P.6

RAW SEQUENCE LISTING

DATE: 11/10/2005

PATENT APPLICATION: US/09/319,156C

TIME: 13:04:56

Input Set : A:\103514-mlm-11-05.ST25.txt

Output Set: N:\CRF4\11102005\I319156C.raw

64	gcttatagaa	ggacccttag	tatggggtaa	tcccctctgg	gaaaccaagc	cccagtactc	60										
66	agcaggaaaa	atagaatagg	aaacctcaca	aggacatact	ttccctccct	ccagatggct	120										
68	agccactgag	gaaggaaaaa	tacttcacc	tgcagctaac	caacagaaat	tactaaaac	180										
70	ccttcaccaa	accttccact	tagcattga	tagcacccat	cagatggcca	aattattatt	240										
72	tactggacca	ggcctttca	aaactatcaa	gaagatagtc	aggggctgtg	aagtgtgcc	300										
74	aagaataat						310										
77	<210>	SEQ ID NO:	5														
78	<211>	LENGTH:	103														
79	<212>	TYPE:	PRT														
80	<213>	ORGANISM:	MSRV														
83	<220>	FEATURE:															
84	<221>	NAME/KEY:	misc_feature														
85	<222>	LOCATION:	(26)..(26)														
86	<223>	OTHER INFORMATION:	Xaa = any amino acid														
88	<400>	SEQUENCE:	5														
90	Leu	Ile	Glu	Gly	Pro	Leu	Val	Trp	Gly	Asn	Pro	Leu	Trp	Glu	Thr	Lys	
91	1				5					10				15			
W-->	94	Pro	Gln	Tyr	Ser	Ala	Gly	Lys	Ile	Glu	Xaa	Glu	Thr	Ser	Gln	Gly	His
95					20					25				30			
98	Thr	Phe	Leu	Pro	Ser	Arg	Trp	Leu	Ala	Thr	Glu	Glu	Gly	Lys	Ile	Leu	
99						35				40				45			
102	Ser	Pro	Ala	Ala	Asn	Gln	Gln	Lys	Leu	Leu	Lys	Thr	Leu	His	Gln	Thr	
103						50				55				60			
106	Phe	His	Leu	Gly	Ile	Asp	Ser	Thr	His	Gln	Met	Ala	Lys	Leu	Leu	Phe	
107	65					65				70				75			80
110	Thr	Gly	Pro	Gly	Leu	Phe	Lys	Thr	Ile	Lys	Lys	Ile	Val	Arg	Gly	Cys	
111						85				90				95			
114	Glu	Val	Cys	Gln	Arg	Asn	Asn										
115					100												
118	<210>	SEQ ID NO:	6														
119	<211>	LENGTH:	635														
120	<212>	TYPE:	DNA														
121	<213>	ORGANISM:	MSRV														
123	<400>	SEQUENCE:	6														
124	ccctgtatct	ttaacctcct	tgttaagttt	gtctcttcca	aatcaaaac	tgtaaaacta									60		
126	caaattgttc	ttcaaatgga	gcaccagatg	gagtccatga	ctaagatcca	ccgtggaccc									120		
128	ctggaccggc	ctgctagccc	atgctccgat	gttaatgaca	ttgaaggcac	ccctcccgag									180		
130	gaaatctcaa	ctgcacaacc	cctactatgc	cccaattcag	cggaagcac	ttagagcggt									240		
132	catcagccaa	cctcccaaac	agcacttggg	ttttctgtt	gagaggggg	actgagagac									300		
134	aggactagct	ggatttccta	ggccaacgaa	aatccctaa	gcctagctgg	gaaggtgact									360		
136	gcatccaccc	ctaaacatgg	ggcttgcaac	ttagctcaca	cccgaccaat	cagagagctc									420		
138	actaaaaatgc	taattaggca	aaaataggag	gtaaagaaat	agccaatcat	ctattgcctg									480		
140	agagcacagc	gggagggaca	aggatcggg	tataaacc	ggcattcgag	ccgcaacgg									540		
142	caacccccc	tgggtccct	ccctttgtat	gggcgctctg	ttttcactct	atttcactct									600		
144	attaaatctt	gcaactgaaa	aaaaaaaaaaa	aaaaaa											635		
147	<210>	SEQ ID NO:	7														
148	<211>	LENGTH:	77														
149	<212>	TYPE:	PRT														
150	<213>	ORGANISM:	MSRV														

RAW SEQUENCE LISTING

DATE: 11/10/2005

PATENT APPLICATION: US/09/319,156C

TIME: 13:04:56

Input Set : A:\103514-mlm-11-05.ST25.txt

Output Set: N:\CRF4\11102005\I319156C.raw

152 <400> SEQUENCE: 7
 154 Pro Cys Ile Phe Asn Leu Leu Val Lys Phe Val Ser Ser Arg Ile Lys
 155 1 5 10 15
 158 Thr Val Lys Leu Gln Ile Val Leu Gln Met Glu His Gln Met Glu Ser
 159 20 25 30
 162 Met Thr Lys Ile His Arg Gly Pro Leu Asp Arg Pro Ala Ser Pro Cys
 163 35 40 45
 166 Ser Asp Val Asn Asp Ile Glu Gly Thr Pro Pro Glu Glu Ile Ser Thr
 167 50 55 60
 170 Ala Gln Pro Leu Leu Cys Pro Asn Ser Ala Gly Ser Ser
 171 65 70 75

174 <210> SEQ ID NO: 8
 175 <211> LENGTH: 32
 176 <212> TYPE: DNA
 177 <213> ORGANISM: MSRV
 179 <400> SEQUENCE: 8
 180 tgggttcca ttttaagac catctgttagc tt 32
 183 <210> SEQ ID NO: 9
 184 <211> LENGTH: 1481
 185 <212> TYPE: DNA
 186 <213> ORGANISM: MSRV
 188 <400> SEQUENCE: 9
 189 atggccctcc cttatcatac ttttctctt actgttctct tacccccc tt cgctctca 60
 191 gcacccccc tcatgctgctg tacaaccgt agctcccc accaagagtt tctatgaaga 120
 193 acggcgcttc ctggaaatat tgatgcccc tcataatagga gtttatctaa gggaaactcc 180
 195 accttcactg cccacaccca tatgccccgc aactgctata actctgccac tctttgcatt 240
 197 catgcaaata ctcattattt gacaggaaa atgattaatc ctatgttgc tggaggactt 300
 199 ggagccactg tctgttgac ttacttcacc cataccagta tgtctgtatgg ggggttgaatt 360
 201 caaggtcagg caagaaaaaaa acaagtaaag gaagcaatct cccaaactgac ccggggacat 420
 203 agcaccccta gcccctacaa aggacttgtt ctctaaaac tacatgaaac cttccgtacc 480
 205 catactcgcc tggtgagcct atttaatacc accctcaactc ggctccatga ggtctcagcc 540
 207 caaaacccta ctaactgttg gatgtgcctc cccctgcact tcaggccata cattcaatc 600
 209 cctgttcctg aacaatggaa caacttcagg acagaaataa acaccactc cgtttttagta 660
 211 ggacctcttg tttccaatct gaaataacc catacctaa acctcacctg tgtaaaattt 720
 213 agcaatacta tagacacaac cagctcccaa tgcatacggt gggtaacacc tcccacacga 780
 215 atagtctgcc taccctcagg aatattttt gtctgtggta cctcagccta tcattgttt 840
 217 aatggctctt cagaatctat gtgcttcctc tcattcttag tgccccctat gaccatctac 900
 219 actgaacaag atttatacaa tcatgtcgta cctaaagcccc acaacaaaag agtaccatt 960
 221 ctccttttg ttatcagagc aggagtgcata ggcagactag gtactggcat tggcagttatc 1020
 223 acaacctcta ctcaggctta ctacaaacta tctcaagaaa taaatggta catggAACAG 1080
 225 gtcactgact ccctggcac ttgcaagat caacttaact ccctagcagc agtagtcctt 1140
 227 caaaatcgaa gagctttaga ttgcttaacc gccaaaagag gggaaacctg tttatTTTA 1200
 229 ggagaagaac gctgttatta tgtaatcaa tccagaatttgcactgagaa agttaaagaa 1260
 231 attcgagatc gaatacaatg tagagcagag gagcttcaaa acaccgaacg ctggggcctc 1320
 233 ctcagccaaat ggttccctg gtttcccc ttcttaggac ctctagcagc tctaatattt 1380
 235 ttactcctctt tgccaccctg tatcttaac ctccttggta agttgtctc ttccagaattt 1440
 237 gaagctgtta agctacagat ggtcttacaa atgaaacccc a 1481
 240 <210> SEQ ID NO: 10
 241 <211> LENGTH: 493

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/319,156C

DATE: 11/10/2005
TIME: 13:04:56

Input Set : A:\103514-mlm-11-05.ST25.txt
Output Set: N:\CRF4\11102005\I319156C.raw

242 <212> TYPE: PRT
 243 <213> ORGANISM: MSRV
 246 <220> FEATURE:
 247 <221> NAME/KEY: misc_feature
 248 <222> LOCATION: (39)..(39)
 249 <223> OTHER INFORMATION: Xaa = any amino acid
 251 <400> SEQUENCE: 10
 253 Met Ala Leu Pro Tyr His Thr Phe Leu Phe Thr Val Leu Leu Pro Pro
 254 1 5 10 15
 257 Phe Ala Leu Thr Ala Pro Pro Pro Cys Cys Cys Thr Thr Ser Ser Ser
 258 20 25 30
 W--> 261 Pro Tyr Gln Glu Phe Leu Xaa Arg Thr Arg Leu Pro Gly Asn Ile Asp
 262 35 40 45
 265 Ala Pro Ser Tyr Arg Ser Leu Ser Lys Gly Asn Ser Thr Phe Thr Ala
 266 50 55 60
 269 His Thr His Met Pro Arg Asn Cys Tyr Asn Ser Ala Thr Leu Cys Met
 270 65 70 75 80
 273 His Ala Asn Thr His Tyr Trp Thr Gly Lys Met Ile Asn Pro Ser Cys
 274 85 90 95
 277 Pro Gly Gly Leu Gly Ala Thr Val Cys Trp Thr Tyr Phe Thr His Thr
 278 100 105 110
 281 Ser Met Ser Asp Gly Gly Ile Gln Gly Gln Ala Arg Glu Lys Gln
 282 115 120 125
 285 Val Lys Glu Ala Ile Ser Gln Leu Thr Arg Gly His Ser Thr Pro Ser
 286 130 135 140
 289 Pro Tyr Lys Gly Leu Val Leu Ser Lys Leu His Glu Thr Leu Arg Thr
 290 145 150 155 160
 293 His Thr Arg Leu Val Ser Leu Phe Asn Thr Thr Leu Thr Arg Leu His
 294 165 170 175
 297 Glu Val Ser Ala Gln Asn Pro Thr Asn Cys Trp Met Cys Leu Pro Leu
 298 180 185 190
 301 His Phe Arg Pro Tyr Ile Ser Ile Pro Val Pro Glu Gln Trp Asn Asn
 302 195 200 205
 305 Phe Ser Thr Glu Ile Asn Thr Thr Ser Val Leu Val Gly Pro Leu Val
 306 210 215 220
 309 Ser Asn Leu Glu Ile Thr His Thr Ser Asn Leu Thr Cys Val Lys Phe
 310 225 230 235 240
 313 Ser Asn Thr Ile Asp Thr Thr Ser Ser Gln Cys Ile Arg Trp Val Thr
 314 245 250 255
 317 Pro Pro Thr Arg Ile Val Cys Leu Pro Ser Gly Ile Phe Phe Val Cys
 318 260 265 270
 321 Gly Thr Ser Ala Tyr His Cys Leu Asn Gly Ser Ser Glu Ser Met Cys
 322 275 280 285
 325 Phe Leu Ser Phe Leu Val Pro Pro Met Thr Ile Tyr Thr Glu Gln Asp
 326 290 295 300
 329 Leu Tyr Asn His Val Val Pro Lys Pro His Asn Lys Arg Val Pro Ile
 330 305 310 315 320
 333 Leu Pro Phe Val Ile Arg Ala Gly Val Leu Gly Arg Leu Gly Thr Gly
 334 325 330 335

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/319,156C

DATE: 11/10/2005
TIME: 13:04:56

Input Set : A:\103514-mlm-11-05.ST25.txt
Output Set: N:\CRF4\11102005\I319156C.raw

337 Ile Gly Ser Ile Thr Thr Ser Thr Gln Phe Tyr Tyr Lys Leu Ser Gln
338 340 345 350
341 Glu Ile Asn Gly Asp Met Glu Gln Val Thr Asp Ser Leu Val Thr Leu
342 355 360 365
345 Gln Asp Gln Leu Asn Ser Leu Ala Ala Val Val Leu Gln Asn Arg Arg
346 370 375 380
349 Ala Leu Asp Leu Leu Thr Ala Lys Arg Gly Gly Thr Cys Leu Phe Leu
350 385 390 395 400
353 Gly Glu Glu Arg Cys Tyr Tyr Val Asn Gln Ser Arg Ile Val Thr Glu
354 405 410 415
357 Lys Val Lys Glu Ile Arg Asp Arg Ile Gln Cys Arg Ala Glu Glu Leu
358 420 425 430
361 Gln Asn Thr Glu Arg Trp Gly Leu Leu Ser Gln Trp Met Pro Trp Val
362 435 440 445
365 Leu Pro Phe Leu Gly Pro Leu Ala Ala Leu Ile Leu Leu Leu Leu Phe
366 450 455 460
369 Gly Pro Cys Ile Phe Asn Leu Leu Val Lys Phe Val Ser Ser Arg Ile
370 465 470 475 480
373 Glu Ala Val Lys Leu Gln Met Val Leu Gln Met Glu Pro
374 485 490
377 <210> SEQ ID NO: 11
378 <211> LENGTH: 32
379 <212> TYPE: DNA
380 <213> ORGANISM: MSRV
382 <400> SEQUENCE: 11
383 tcaaaaatcgagagctttacttgcttaac cg 32
386 <210> SEQ ID NO: 12
387 <211> LENGTH: 1329
388 <212> TYPE: DNA
389 <213> ORGANISM: MSRV
392 <220> FEATURE:
393 <221> NAME/KEY: misc_feature
394 <222> LOCATION: (594)..(594) /
395 <223> OTHER INFORMATION: n = a, g, c or t/u
397 <220> FEATURE:
398 <221> NAME/KEY: misc_feature /
399 <222> LOCATION: (602)..(602) /
400 <223> OTHER INFORMATION: n = a, g, c or t/u
402 <220> FEATURE:
403 <221> NAME/KEY: misc_feature /
404 <222> LOCATION: (1232)..(1232) /
405 <223> OTHER INFORMATION: n = a, g, c or t/u
407 <400> SEQUENCE: 12
408 tcaaaaatcgagagctttacttgcttaac cgccaaaaga gggggaaacct gtttattttt 60
410 aggggaagaa tgcttttagt atgttaatca atctggaatc attactgaga aagttaaaga 120
412 aattttagat cgaatataat gttagcaga ggaccttcaa aacactgcac cctggggcct 180
414 cctcagccaa tggatgccct ggactctccc cttcttagga cctctagcag ctataatatt 240
416 ttactcctc tttggaccct gtatcttcaa cttcttggtt aagtttgctt cttccagaat 300
418 tgaagctgta aagctacaaa tagtcttca aatgaaaccc cagatgcagt ccattactaa 360

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 11/10/2005
PATENT APPLICATION: US/09/319,156C TIME: 13:04:57

Input Set : A:\103514-mlm-11-05.ST25.txt
Output Set: N:\CRF4\11102005\I319156C.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; Xaa Pos. 26
Seq#:10; Xaa Pos. 39
Seq#:12; N Pos. 594,602,1232
Seq#:13; Xaa Pos. 26,42,46
Seq#:40; N Pos. 1240,1246

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/319,156C

DATE: 11/10/2005

TIME: 13:04:57

Input Set : A:\103514-mlm-11-05.ST25.txt

Output Set: N:\CRF4\11102005\I319156C.raw

L:94 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:16
L:261 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:32
L:426 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:540
L:428 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:600
L:448 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:1200
L:482 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:16
L:486 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:32
L:1233 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:1200